Attorney Docket No.: 142193XZ (3880) Express M

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## **AMENDMENTS TO THE SPECIFICATION**

Please amend the Specification as follows, without prejudice or disclaimer to continued examination on the merits:

Please amend Paragraph [0031] as follows, without prejudice or disclaimer to continued examination on the merits:

[0031] Referring now to Figure 1, there is shown a flowchart showing the information flow utilized in embodiments of this invention. First, a patient 10 enters a medical facility or medical transport vehicle with an identification tag [20] 12. If a patient 10 does not have an identification tag [20] 12, one can be created for them. Thereafter, when the patient 10 arrives for their medical imaging scan, the information contained in the patient's identification tag [20] 12 can be read and/or downloaded [22] 14 to a computer system, such as a computer system associated with the medical imaging device. The patient's information can then be analyzed [24] 16 by the computer system, and an optimal data acquisition protocol can then be selected [26] 18 based, at least in part, on the patient's information that is stored in their identification tag [20] 12. Thereafter, the patient 10 can be scanned [28] 20, and then their identification tag [20] 12 can be updated [28] 22 to include the new scan information and any other relevant information. In this manner, the patient's identification tag [20] 12 is kept up-to-date for any additional scans that may be needed, or for the patient's next visit to the medical facility. This process may be repeated as needed.

Please amend Paragraph [0032] as follows, without prejudice or disclaimer to continued examination on the merits:

[0032] When selecting the optimal protocol for a given situation [26] 18, the computer system may query relevant databases associated therewith for information about previous protocols that worked with other patients in similar situations. The

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computer system may also query for prior protocols for the patient <u>10</u>, or indicate any issues or concerns that were associated with prior protocols. Then, the computer system may use this information, together with the doctor's desired diagnostic result and the patient's information, to select the optimal data acquisition protocol for the present situation [26] <u>18</u>.

Please amend Paragraph [0034] as follows, without prejudice or disclaimer to continued examination on the merits:

[0034] Referring now to Figure 2, there is shown a schematic diagram showing the architecture of an exemplary medical imaging system [20] 30, as utilized in embodiments of this invention. In this exemplary non-limiting embodiment, the medical imaging system [20] 30 is an x-ray system. These x-ray systems [20] 30 generally comprise an x-ray source [15] 32, an x-ray detector [22] 36, and an x-ray detector controller [27] 50 that contains electronics for operating the x-ray detector [22] 36. During operation, x-rays [17] 34 are directed from the x-ray source [15] 32 towards the xray detector [22] 36. After passing through an object being imaged (i.e., a patient [19] 10), the x-rays [17] 34 fall upon the detector [22] 36, where the x-rays 34 are converted to an electrical charge. This electrical charge is then sent to an image processor [28] 38, where the image signal is processed and enhanced. The processed image may then be displayed on a cathode ray tube display [32] 40, or other suitable display, and/or the image can be stored in mass storage [30] 42 for later retrieval. The image processor [28] 38 can also produce a brightness control signal which can be applied to an exposure control circuit [34] 44 to regulate the power supply [16] 52, which can thereby regulate the x-ray source [15] 32. The overall operation of the x-ray system 30 may be governed by a system controller [36] 46, which may receive commands from operator interface [38] 48. Operator interface [38] 48 may comprise a keyboard, touchpad, or other suitable input device. An associated cathode ray tube display [32] 40 (or other suitable display) may allow the operator to view the reconstructed image and other data from the image processor [28] 38. The operator supplied commands and parameters may be used by the

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system controller [36] <u>46</u> to provide control signals and information to the image processor [28] <u>38</u>, the x-ray detector controller [27] <u>50</u>, the exposure control circuit [34] <u>44</u>, and/or the identification tag [20] <u>12</u>.

Please amend Paragraph [0035] as follows, without prejudice or disclaimer to continued examination on the merits:

[0035] Embodiments of the present invention may make use of software or firmware running on the system controller [36] 46 to carry out the processing of data in the methods and systems of this invention. A mouse, pointing device, or other suitable input device may be employed to facilitate the entry of data and/or image locations. Other embodiments of this invention may utilize a general purpose computer or workstation having a memory and/or printing capability for storing or printing images. Suitable memory devices are well known and include, but are not limited to, RAM, diskettes, hard drives, optical media, etc. Embodiments using stand-alone computers or workstations may receive data therefrom via conventional electronic storage media and/or via a conventional communications link, and images may then be reconstructed therefrom.

Please amend Paragraph [0036] as follows, without prejudice or disclaimer to continued examination on the merits:

The identification tags [20] 12 of this invention may communicate in any suitable manner with the system controller [36] 46. For example, a patient's identification tag [20] 12 may be read automatically via an IR or RF link when the patient 10 enters a specific area (i.e., the medical facility lobby, the medical imaging scanner room, etc.). Alternatively, the information stored on a patient's identification tag [20] 12 may be read when prompted by the system controller [36] 46. There will be less chance of errors by transferring the information directly from the identification tag to the system controller [36] 46, as opposed to having a technician manually enter the information into

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the system controller [36] <u>46</u>. Once a patient's information is downloaded to the system controller [36] <u>46</u>, the information may be analyzed, other relevant information may be considered, and then an optimal data acquisition protocol may be selected. Allowing the system controller [36] <u>46</u> or other suitable computer to select the optimal data acquisition protocol removes the subjectivity of the selection process.